<u>**AMENDMENTS TO THE CLAIMS**</u>

This listing of claims replaces all prior versions, and listings, of claims in the application:

<u>**Listing of Claims:**</u>

1- 8 (Cancelled)

9.   (Currently Amended) In a sync community that includes one or more replicas, a method for replicating the one or more replicas, the method comprising a first replica performing:

sending a request changes message to a second replica in a sync community, wherein the request changes message includes a knowledge including information representing <u>a plurality of</u> changes that ~~are known by~~ the first replica <u>is aware of</u> by including information representing a change ID for each change ~~known by~~<u>that</u> the first replica <u>is aware of,</u> wherein each change ID includes a replica ID associated with the change and a version specific to a specific change<u>, wherein knowledge of at least two or more changes is included in a vector, the vector representing a plurality of change IDs, wherein each vector includes at least one replica ID identifying a replica associated with the plurality of changes, and at least one magnitude representing the number of changes in the plurality of changes</u>;

receiving one or more convey changes messages from the second replica, wherein each convey changes message includes at least one change that the first replica ~~does not know~~<u>is not aware of</u> based on a comparison by the second replica between the knowledge of the first replica and a knowledge of the second replica; and

applying one or more of the one or more convey changes messages from the second replica to data at the first replica.

10.   (Previously Presented) The method as defined in claim 9, wherein receiving one or more convey changes messages from the second replica further comprises:

receiving a change ID for each change in each convey message; and

receiving a made-with-knowledge value for a particular change, wherein the made-with knowledge value represents knowledge available to a particular replica when the particular replica made the particular change.

11.   (Previously Presented) The method as defined in claim 9, further comprising receiving a complete bundle message from the second replica.

12.   (Previously Presented) The method as defined in claim 11, wherein receiving a complete bundle message from the second replica further comprises:

receiving a count in the complete bundle message that indicates how many convey changes messages were sent by the second replica; and

receiving a learned knowledge in the complete bundle message that represents knowledge that the first replica should learn if the first replica received and applied the convey changes message reflected in the count.

13.   (Previously Presented) The method as defined in claim 9, further comprising sending an advertise changes message to one or more replicas including the second replica in the sync community, wherein the advertise changes message includes the knowledge of the first replica and enables each of the one or more replicas to determine whether to replicate with the first replica.

14.   (Previously Presented) The method as defined in claim 13, further comprising receiving a request changes message from a particular replica in response to the advertise changes message.

15.   (Previously Presented) The method as defined in claim 9, further comprising:
receiving a request changes message from the second replica, wherein the request changes message includes the knowledge of the second replica; and

sending at least one convey changes message to the second replica, wherein the at least one convey changes message includes one or more changes, a change ID for each of the one or more changes, and a made-with-knowledge value for at least some of the one or more changes.

16.   (Previously Presented)   The method as defined in claim 15, further comprising sending a complete bundle message to the second replica that includes a count and a learned knowledge.

17.   (Previously Presented)   The method as defined in claim 9, further comprising sending a convey knowledge message to indicate to the second replica that the knowledge of the first replica has changed.

18.   (Previously Presented)   The method as defined in claim 9, further comprising sending a cancel change flow message to indicate that the first replica does not want to receive additional convey changes messages.

19.   (Previously Presented)   The method as defined in claim 9, wherein sending a request changes message to a second replica in a sync community further includes including a filter in the request changes message such that only changes satisfying the filter are sent in the convey changes messages.

20.   (Previously Presented)   The method as defined in claim 19, further comprising receiving a complete bundle message that includes filtered learned knowledge, wherein the first replica maintains a filtered learned knowledge and a knowledge.

21.   (Previously Presented)   The method as defined in claim 9, further comprising receiving a minimum knowledge in at least one of the convey changes messages, wherein the minimum knowledge identifies a minimum knowledge of the first replica in order to ensure that the first replica and the second replica have a valid replication.

22-28 (Cancelled)

29.   (Currently Amended) In a sync community including one or more replicas, a method for communicating changes from a first replica to other replicas in the sync community, the method comprising:

storing a knowledge at the first replica, wherein the knowledge includes one or more change IDs that represent changes that the first replica is aware of; and

sending a convey changes message to a second replica, wherein the convey changes message comprises:

a change argument that represents a particular change;

a change ID argument that is associated with the particular change, wherein the change ID argument identifies a particular replica that assigned a change ID to the particular change;

a made-with-knowledge argument that includes a knowledge including information representing a plurality of changes that are known by the first replica is aware of by including information representing a change ID for each change known bythat the first replica is aware of, wherein each change ID includes a replica ID associated with the change and a version specific to a specific change for changes known by the particular replica that assigned the change ID is aware of when the change ID was assigned to the particular change or when the change argument is sent, wherein knowledge of at least two or more changes is included in a vector, the vector representing a plurality of change IDs, wherein each vector includes at least one replica ID identifying a replica associated with the plurality of changes, and at least one magnitude representing the number of changes in the plurality of changes; and

wherein the made-with-knowledge argument convey changes message is used to determine whether or not to selectively apply a change represented in the change argument should be applied to the second replica.

30.   (Previously Presented) The method as defined in claim 29, wherein sending a convey changes message to a second replica further comprises:

storing the convey changes message on a removable medium; and

transporting the removable medium to the second replica such that the second replica can retrieve and apply the particular change.

31.   (Previously Presented)   The method as defined in claim 29, wherein sending a convey changes message to a second replica further comprises: storing the convey changes message on a public area in a server where the second replica can retrieve the convey changes message from the public area on the server.

32.   (Original) A computer program product having computer-executable instructions for performing the method of claim 29.

33.   (Currently Amended) In a sync community that includes one or more replicas, a computer program product for implementing a method for replicating the one or more replicas, the computer program product comprising:

a computer readable medium having computer-executable instructions for performing the method, the method comprising a first replica performing:

sending a request changes message to a second replica in a sync community, wherein the request changes message includes a knowledge including information representing a plurality of changes that ~~are known by~~ the first replica is aware of by including information representing a change ID for each change ~~known by~~that the first replica is aware of, wherein each change ID includes a replica ID associated with the change and a version specific to a specific change, wherein knowledge of at least two or more changes is included in a vector, the vector representing a plurality of change IDs, wherein each vector includes at least one replica ID identifying a replica associated with the plurality of changes, and at least one magnitude representing the number of changes in the plurality of changes;

receiving one or more convey changes messages from the second replica, wherein each convey changes message includes at least one change that the first replica ~~does not know~~is not aware of based on a comparison by the second replica between the knowledge of the first replica and a knowledge of the second replica; and

applying one or more of the one or more convey changes messages from the second replica to data at the first replica.

34.   (Previously Presented) The computer program product as defined in claim 33, wherein receiving one or more convey changes messages from the second replica further comprises:

receiving a change ID for each change in each convey message; and

receiving a made-with-knowledge value for a particular change, wherein the made-with knowledge value represents knowledge available to a particular replica when the particular replica made the particular change.

35.   (Previously Presented)   The computer program product as defined in claim 33, further comprising receiving a complete bundle message from the second replica that includes a count of the number of convey messages sent by the second replica and a learned knowledge that represents knowledge the first replica should learn if the first replica received and applied the number of convey changes messages reflected by the count.

36.   (Previously Presented)   The computer program product as defined in claim 33, further comprising sending an advertise changes message to one or more replicas including the second replica in the sync community, wherein the advertise changes message includes the knowledge of the first replica and enables each of the one or more replicas to determine whether to replicate with the first replica.

37.   (Previously Presented)   The computer program product as defined in claim 33, further comprising:

        receiving a request changes message from the second replica, wherein the request changes message includes the knowledge of the second replica;

        sending at least one convey changes message to the second replica, wherein the at least one convey changes message includes one or more changes, a change ID for each of the one or more changes, and a made-with-knowledge value for at least some of the one or more changes; and

        sending a complete bundle message to the second replica that includes a count and a learned knowledge.

38.   (Previously Presented)   The computer program product as defined in claim 33, wherein sending a request changes message to a second replica in a sync community further includes including a filter in the request changes message such that only changes satisfying the filter are sent in the convey changes messages.

39.   (Previously Presented) The computer program product as defined in claim 38, further comprising receiving a complete bundle message that includes filtered learned knowledge, wherein the first replica maintains a filtered learned knowledge and a knowledge.

40.   (Previously Presented) The computer program product as defined in claim 33, further comprising receiving a minimum knowledge in at least one of the convey changes messages, wherein the minimum knowledge identifies a minimum knowledge of the first replica in order to ensure that the first replica and the second replica have a valid replication.

41.   (Cancelled)

42.   (Currently Amended) The method of claim 4~~1~~9, wherein the knowledge further includes an exception list when knowledge of changes cannot be continuously represented by the vector, the exception list including additional change IDs for changes outside the range of the vector.

43.   (Previously Presented) The method of claim 9, wherein the convey changes message includes a change, a change ID, and a made with knowledge value including information representing a change ID for each change known by the second replica.

44.   (Previously Presented) The method of claim 9, wherein the knowledge includes information representing changes made on other replicas than the first replica.

45.   (Previously Presented) The method of claim 9, wherein at least one replica ID associated with a change is a replica ID for a replica that assigns change IDs for another replica.

46.   (Currently Amended) The method of claim 44~~44~~<u>45</u>, wherein the replica that assigns change IDs for another replica is a central server that assigns change IDs for clients of the central server.